

Preservation Workshops

# Brick Earth Stone Timber

# 2020

Western Center for  
Historic Preservation

Historic Preservation  
Training Center



# Frequently Asked Questions

## Are the BEST Preservation Workshops part of the Vanishing Treasures Program?

Starting in 2020, the training arm of the Vanishing Treasures Program - the Western Center for Historic Preservation (WCHP) - was moved under the Historic Preservation Training Center in order to offer workshops servicewide. WCHP's Brick, Earth, Stone, & Timber (BEST) Preservation Workshops will continue to use the curriculum created while under the Vanishing Treasures Program. We are indebted to Vanishing Treasures for supporting the design and implementation of a structured series of workshops that are considered the gold standard of historic preservation trainings in the NPS.

## What is the BEST Preservation Workshop Series?

The BEST Preservation Workshop Series trains employees at all levels of the National Park Service in the preservation of traditionally-built historic resources using problem-based and hands-on learning.

## Who can take a course?

Courses are open to anyone who is interested: federal, state, and local government employees; private sector contractors, consultants, architects, and design professionals; students; non-profit employees; and homeowners. Federal employees must have supervisory approval to register for workshops.

## What is the cost per course?

Course costs vary. Refer to each course offering page to see associated costs.

## Who do I talk to about an accommodation?

If you are a person with a disability and you need accommodations, please contact us at least 3 weeks before the workshops at [BESTpreservation@nps.gov](mailto:BESTpreservation@nps.gov) or (307) 739-3571.

## Is there still lodging at White Grass Dude Ranch?

Yes, for workshops held in Grand Teton National Park, there is limited, free-of-charge, housing available at the White Grass Dude Ranch. The ranch is a rehabilitated historic dude ranch located inside the park that serves as WCHP's training facility. More information is available in the registration form.

## Program Sponsors and Supporters



# Course Progression

BEST Preservation Workshops build upon one another, following the natural progression of a historic preservation project. Illustrated below, this structure identifies major categories that take a project from concept to reality, and from design to implementation.

I

## Inquiry

Courses cover the basics of historic preservation and are strongly recommended for all students before taking more advanced courses.

D&I

## Documentation & Investigation

Documentation workshops focus on researching historic resources and recording existing conditions in the field. Investigation workshops teach problem-solving strategies for defining deterioration problems and quantifying their potential impact.

T

## Treatment

Workshops cover the construction strategies, condition assessment, treatment, and conservation science of major building materials. Treatment workshops are hands-on and split between the field and the classroom.

M

## Maintenance

Workshops introduce students to methods and best practices for continued stewardship of historic resources after preservation, including how to evaluate treatments, write and follow maintenance and lifecycle plans, and bring historic resources into asset management programs.

ST

## Special Topics

A selection of special topics cover pressing issues in preservation each year.

# Workshops and Trainings

Course Title	Location	Dates
<b>Inquiry</b>		
Guiding Principles for Field-Based Historic Preservation	Fort Vancouver National Historic Site	April 14–16
	Grand Teton National Park	June 23–25
	Fairbanks, AK	May 19–21
	Yellowstone National Park	October 6–8
Preservation & Treatment	Grand Canyon National Park	online: June 15–July 25 classroom: July 27–31
<b>Documentation and Investigation</b>		
3D Photogrammetry	Grand Teton National Park	August 17–21
Defining the Problem: Diagnosing Historic Building Deterioration	Grand Teton National Park	August 10–13
<b>Treatment</b>		
Beginning Historic Wood Window Preservation	Yellowstone National Park	April 6–10
Historic Masonry Preservation & Repair	Acadia National Park	June 15–19
Intermediate Historic Wood Window Preservation & Repair	Frederick, MD	November 2–6

# Workshops and Trainings

Course Title	Location	Dates
<b>Treatment</b>		
Pre-Contact Masonry Preservation & Repair	Wupatki National Monument	October 19–23
Wood & Log Preservation & Repair	Grand Teton National Park	July 13–17
<b>Maintenance</b>		
<i>No courses are being offered this year. Check back next year!</i>		
<b>Special Topics</b>		
Basic Preservation Engineering & Stabilization for Wood Structures	Pinnacles National Park	May 12–14
Creating & Using Oral Histories in the Preservation of Traditional Resources	Grand Teton National Park	July 21–23
Integrated Pest Management for Cultural Resources	Grand Teton National Park	October 6–8
Preserving Cultural & Wilderness Resources: Achieving Common Ground	Hawaii Volcanoes National Park	October 20–22
Stone, Earth, Cement, & Coatings: Preserving & Repairing Multi-Material Masonry Systems	Guadalupe Mountains National Park	June 1–5
Thinking Through Water, Air, and Energy Issues in Historic Structures	Grand Teton National Park	August 25–27

For the most up-to-date information and to register, visit:  
<https://mylearning.nps.gov/best-preservation-workshop-series-2020/>



# Guiding Principles for Field-Based Historic Preservation

Fort Vancouver National Historic Site  
Grand Teton National Park  
Fairbanks, Alaska  
Yellowstone National Park

April 14–16  
June 23–25  
May 19–21  
October 6–8

## Instructors

Julie McGilvray	<i>Preservation Services Program Manager National Capitol Area</i>	Charlie Pepper	<i>NPS Emeritus</i>
Craig Chenevert	<i>Historical Architect Grand Canyon National Park</i>	Lisa Sasser	<i>NPS Emeritus</i>
Grant Crosby	<i>Historical Architect Alaska Regional Office</i>	Blaise Davi	<i>NPS Emeritus</i>

These workshops, offered in partnership with the Cultural Resources Academy, will present a working knowledge of historic preservation principles. Upon completion, participants will have a deeper understanding of how treatment decisions are developed, how resources are evaluated and how compliance, laws, and Secretary of the Interior's Standards for the Treatment of Historic Properties are directly connected to the work performed by trades personnel. This course will be split between classroom and field-based sessions, and will provide a practical education in the why's and how's of historic preservation in the NPS.

## Tuition

For all courses (except Fairbanks)

\$250	General participant
\$50	Student (at least half time in an accredited institution)
\$25	home park employees

Fairbanks course  
No cost to participants.





# Preservation & Treatment

## Cultural Resources Academy Workshop

Grand Canyon National Park June 15–July 25 (online), July 27–31 (classroom)

### Instructors

Charlie Pepper

*NPS Emertius  
Program Manager, Olmsted Center for  
Landscape Preservation*

Todd Morgan

*Northern Rockies Park Asset Management  
Organization Lead & Hub 2 Lead*

Katherine Birmingham

*Branch Chief, Cultural Resources  
Grand Teton National Park*

Gavin Gardner

*Chief, Resources  
Salem Maritime and Saugus Iron Works  
National Historic Sites*

Created and offered by the Stephen T. Mather Training Center's Cultural Resources Academy, this workshop gives students an opportunity to gain valuable skills essential to directing and overseeing the preservation, treatment, and maintenance of park cultural resources within a supportive environment of collaborative, interdisciplinary teamwork. The course begins with six weeks of interactive online coursework and concludes with four days of classroom and field experience. Trainees will work in interdisciplinary teams to solve preservation and treatment challenges in a park setting. Students must participate online and attend the classroom session to receive credit for the class. This course is open to NPS employees only.

### Tuition

There are no tuition fees for the Preservation & Treatment course. This course is open to NPS employees only. Registration: <https://mylearning.nps.gov/training-courses/preservation-treatment/>





# 3D Photogrammetry

## NCPTT Workshop

Grand Teton National Park August 17–21

### Instructors

Neffra Matthews *Geographer  
Bureau of Land Management*

Tom Noble *TN Photogrammetry LLC  
Retired Bureau of Land Management*

The National Center for Preservation Technology and Training (NCPTT) is holding their 3-D Photogrammetry Workshop at the Western Center for Historic Preservation's White Grass Dude Ranch in Grand Teton National Park. The goal of this week-long workshop is to provide practicing professionals and students with a working knowledge of photogrammetry. Participants will receive instruction on photogrammetry, including associated equipment, field work planning and techniques, processing, and products. Upon completion, participants will be able to describe the advantages and disadvantages of each technique, understand their applications, and define and articulate goals when designing a photogrammetry documentation project.

Registration: <https://mylearning.nps.gov/training-courses/3d-photogrammetry/>

### Tuition

\$750 General participant with housing at White Grass Dude Ranch  
\$500 General participant without housing at White Grass Dude Ranch  
\$500 Federal employees and students with housing at White Grass Dude Ranch





# Defining the Problem:

## Diagnosing Historic Building Deterioration

Grand Teton National Park    August 10-13

### Instructors

Michael C. Henry, PE, AIA

*Watson & Henry Associates  
University of Pennsylvania*

Michael P. Schuller, PE

*Atkinson-Nolan & Associates, Inc.*

Defining the Problem: Diagnosing Historic Building Deterioration covers the field documentation and investigation step of the preservation process. In this workshop, students examine historic structures in the field and record conditions on a site-wide scale in an effort to identify the root causes of building failure. Rather than give prescriptive answers to common issues, this course encourages trainees to work through observed problems in small groups and hypothesize what underlying issues are affecting the resource and why. Taking this a step further, trainees also design ways to test their hypotheses, learn about different options for non-destructive evaluation (NDE), and experiment with using NDE techniques in the field.

### Tuition

- \$250 General participant
- \$50 Student (at least half time in an accredited institution)
- \$25 Grand Teton National Park employees

# Beginning Historic Wood Windows Preservation

Yellowstone National Park April 6–10

## Instructors

**Will Grenier** *Exhibit Specialist  
Historic Preservation Training Center*

**Erin Gibbs** *Preservation Training Manager  
Western Center for Historic Preservation*

This hands-on workshop will introduce participants to the basics of wood window preservation, including documentation, stripping, scraping and sanding, back-bedding and glazing, and painting. The course will also cover purified linseed oil products and their use as a comprehensive treatment system for preserving wood windows. To compliment hands-on work, morning lectures will cover topics such as the history of paint and windows; why we preserve historic windows; how to identify the best window treatment alternative; and how to apply the Secretary of the Interior's Standards for the Treatment of Historic Properties to your window project.

## Tuition

- \$250 General participant
- \$50 Student (at least half time in an accredited institution)
- \$25 Yellowstone National Park employees





# Historic Masonry Preservation & Repair

Acadia National Park June 15–19

## Instructors

**Frank Matero** *Chair, Graduate Program in Historic Preservation  
University of Pennsylvania*

**Moss Rudley** *Superintendent  
Historic Preservation Training Center*

Traditional and historic masonry buildings are relatively simple construction systems but their proper preservation, repair, and maintenance require a sound understanding of their components—stone, brick, and mortar—and their weathering. These challenges are often exacerbated by previous repairs and deferred maintenance, often with materials incompatible with normal performance. This workshop will introduce students to historic masonry preservation with a focus on the properties and weathering of masonry system components, and the use of traditional methods for repair. Participants will discuss the importance of condition survey, diagnosis, and preservation options in the context of NPS preservation standards. Trainees will also learn basic conservation science for stone, brick, and mortars, and engage in hands-on work in the field performing simple masonry repairs such as repointing mortar joints and stabilizing courses. Participants can expect to work both in the classroom and in the field at historic gatehouses in Acadia National Park.

## Tuition

- \$250 General participant
- \$50 Student (at least half time in an accredited institution)
- \$25 Acadia National Park employees



# Intermediate Historic Wood Window Preservation & Repair

Frederick, MD November 2–6

## Instructor

**Brandon Gordon** *Deputy Superintendent  
Historic Preservation Training Center*

**Trevor Thomas** *Supervisory Exhibits Specialist, Woodcrafting Division  
Historic Preservation Training Center*

Intermediate Preservation for Historic Wood Windows touches on much of the same material introduced in the Beginner Preservation for Wood Windows workshop, but with the addition of more intensive repair techniques and greater emphasis on hands-on and shop skills. Trainees can still expect to learn building science foundations for preserving wood windows, documentation, reglazing, and finish options, but will spend a greater amount of time focusing on lead safety, joinery, dutchman repairs, and fabrication of rails, stiles, and muntins. Working on site in the Historic Preservation Training Center's shop in Frederick, Maryland, trainees will have the opportunity to work alongside HPTC craftspeople and learn from their extensive expertise working on window projects throughout the United States.

Prior experience with historic wood window preservation is a prerequisite for this workshop.

## Tuition

- \$250 General participant
- \$50 Student (at least half time in an accredited institution)
- \$25 HPTC employees







# Pre-Contact Masonry Preservation & Repair

Wupatki National Monument    October 19–23

## Instructors

**Frank Matero**    *Chair, Graduate Program in Historic Preservation  
University of Pennsylvania*

**Alex Neumann**    *Archaeologist  
Flagstaff Area National Monuments*

Masonry structures require careful understanding of their materials, construction methods, conditions, and environment before any intervention is performed. This workshop, offered in partnership with the Vanishing Treasures Program, combines classroom and hands-on field work to give trainees an effective introduction to pre-contact masonry preservation, with special emphasis on preservation at archaeological sites. Conservation science topics covered in the classroom will include basic geology, stone and mortar characteristics, and common deterioration patterns. Working with experienced archaeologists, students will have opportunities to practice reading condition in the field and discuss when it is necessary to consult professional engineers or conservators. Professional craftspeople will lead field exercises working with masonry tools to repoint mortar joints and stabilize courses.

## Tuition

- \$250    General participant
- \$50    Student (at least half time in an accredited institution)
- \$25    Flagstaff Area National Monuments employees





# Wood & Log Preservation & Repair

Grand Teton National Park July 13–17

## Instructors

**Ron Anthony** *President & Wood Scientist  
Anthony & Associates*

**Tim Green** *Wood & Log Craftsman  
Western Center for Historic Preservation*

Log structures are some of the most versatile, enduring, and widespread resources found in the United States. The five day Wood and Log Preservation and Repair workshop covers beginning wood science and log repair techniques to prepare trainees to effectively care for these important buildings. Using the White Grass Dude Ranch as a laboratory, students will start the workshop studying the basics of wood structure, deterioration, and field investigation methods before progressing to hands-on practice in the field. Afternoons will be spent in field sessions where trainees will have the opportunity to use traditional tools and experiment with log repair strategies under the direction of an expert craftsperson. Trainees can expect additional lectures and group discussions that explore historic log construction techniques, project planning considerations, and finishes.

## Tuition

- \$250 General participant
- \$50 Student (at least half time in an accredited institution)
- \$25 Grand Teton National Park employees





# Basic Preservation Engineering & Stabilization for Wood Structures

Pinnacles National Park May 12–14

## Instructors

**Christine Britton** *Project Engineer  
JVA Engineering*

**Mark Donahue** *Chief of Maintenance  
Pinnacles National Park*

**Timothy Babalis** *Cultural Resources Program Manager  
Pinnacles National Park*

This workshop introduces students to beginning preservation engineering concepts for historic wood structures. Using the historic Bacon Barn and Bear Valley School in Pinnacles National Park as case studies and field sites, students will have the opportunity to analyze real structural problems and design appropriate stabilization measures with the help of a preservation engineer, expert craftsman, and park historian.

For the first part of the workshop, students will learn how historic wood structures function as systems, carry and distribute load, and deteriorate over time. The second half will focus on the project planning process, including how to identify and test underlying cases of building failure, collaborate with park divisions and outside professional services, and choose sensitive stabilization measures. Students can expect half of the workshop to be spent in the classroom, with the other half in the field.

## Tuition

\$250 General participant  
\$50 Student (at least half time in an accredited institution)  
\$25 Pinnacles National Park employees

# Creating & Using Oral Histories in the Preservation of Traditional Resources

Grand Teton National Park July 21–23

## Instructors

Lu Ann Jones, PhD

*Staff Historian  
Park History Program*

Brenna Lissoway, MA, DAS

*Archivist  
Chaco Cultural National Historical Park*

Bridgette Guild

*Museum Curator, Archives Manager, Tribal Liaison  
Grand Teton National Park*

In this course, participants will learn how to effectively plan and implement all phases of an oral history project and will explore how interviews can in turn help inform preservation treatment plans. Using case studies and classroom presentations, participants will gain the tools they need to gather reliable historic information through the use of the spoken word. During the first two days of the workshop students will focus on best practices for how to effectively prepare for an in-person oral interview. Working in small groups, students will have the opportunity during the final day of the workshop to conduct full interviews with retired and long-time NPS employees, whose interviews will be added to the Grand Teton National Park archives. Post-interview, students will receive instruction on the processing and archiving of oral history materials for future use, ending the workshop with packaging their interviews as a final product that can be turned over to the park.

## Tuition

- \$250 General participant
- \$50 Student (at least half time in an accredited institution)
- \$25 Grand Teton National Park employees







# Integrated Pest Management for Cultural Resources

Grand Teton National Park   October 6–8

## Instructors

**John Nelson**

*Biologist, Integrated Pest Management Coordinator  
NPS Regional Office, Interior Regions 6, 7, 8*

**James Howard**

*Integrated Pest Management Physical Scientist  
Biological Resources Division*

This workshop provides an introduction to Integrated Pest Management, with special emphasis on pest issues in parks located in the Northern Rockies. Using resources in Grand Teton National Park as case studies, participants will learn about the inspection and diagnostics processes best suited for determining what pests are present and the extent of infestation. Time will be spent on properly addressing safety concerns and implementing mitigation measures when working in historic structures that have a proven pest problem. Trainees will become familiar with the specific considerations regarding pests common in greater Yellowstone Ecosystem, such as mice, bats, and swallows, and options for exclusion that remain sensitive to historic structures' integrity and comply with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

## Tuition

- \$250   General participant
- \$50   Student (at least half time in an accredited institution)
- \$25   Grand Teton National Park employees





# Preserving Cultural & Wilderness Resources: Achieving Common Ground

Hawai'i Volcanoes National Park    October 20–22

## Instructors

**Laura Kirn**

*Chief of Cultural Resources  
Channel Islands National Park*

**Katherine Wonson**

*Director  
Western Center for Historic Preservation*

**Blair Davenport**

*Regional Staff Museum Coordinator  
NPS Regional Office, Interior Regions 8, 9, 10, 12*

**Tim Devine**

*Branch Chief, Training & Development Wilderness Stewardship Division  
Arthur Carhart National Wilderness Training Center*

There is a long standing perceived conflict between cultural and wilderness laws and stewardship. To help alleviate this perception the interagency Arthur Carhart National Wilderness Training Center has partnered with the Western Center for Historic Preservation to develop and host Preserving Cultural & Wilderness Resources: Achieving Common Ground.

Taught workshop-style, the course presents an overview of law and policy, illuminates the historical context for the pertinent court cases, showcases traditional skills often required to execute preservation projects in wilderness, explores archeological and ethnographic resources, and provides an opportunity for robust discussions. The course encourages participants to challenge their views on cultural and wilderness stewardship, identify the common ground, and work together to solve complex issues in order to protect cultural resources and preserve wilderness character.

## Tuition

- \$250 General participant
- \$50 Student (at least half time in an accredited institution)
- \$25 Hawai'i Volcanoes National Park employees





# Stone, Earth, Cement, & Coatings: Preserving & Repairing Multi-Material Masonry Systems

Guadalupe Mountains National Park June 1–5

## Instructors

Francisco Uviña-Contreras

*Director, Historic Preservation & Regionalism Certificate Program  
University of New Mexico*

Benjamin Ibarra-Sevilla

*Associate Professor, Architecture Program  
University of Texas at Austin*

This workshop is offered in partnership with the Vanishing Treasures Program. Using the Frijole Ranch and Pinery in Guadalupe Mountains National Park as field sites and laboratories, this workshop will focus on preservation challenges for multi-material masonry resources that have a legacy of incompatible treatments. Students will have an opportunity to work with a non-standard masonry system composed of limestone, earthen mortars, and limewash that has seen Portland cement and latex repairs. Working both in the classroom and the field, trainees will have considerable hands-on opportunities to experiment with techniques for the careful removal of latex paints, assess options when treating structures with Portland cement repairs, repoint with earthen mortars, and explore when to use lime-based finishes with earthen masonry components.

## Tuition

- \$250 General participant
- \$50 Student (at least half time in an accredited institution)
- \$25 Guadalupe Mountains National Park employees



# Thinking Through Water, Air, and Energy Issues in Historic Structures

Grand Teton National Park August 25–27

## Instructors

William A. Turner, MS,  
PE, LEED AP

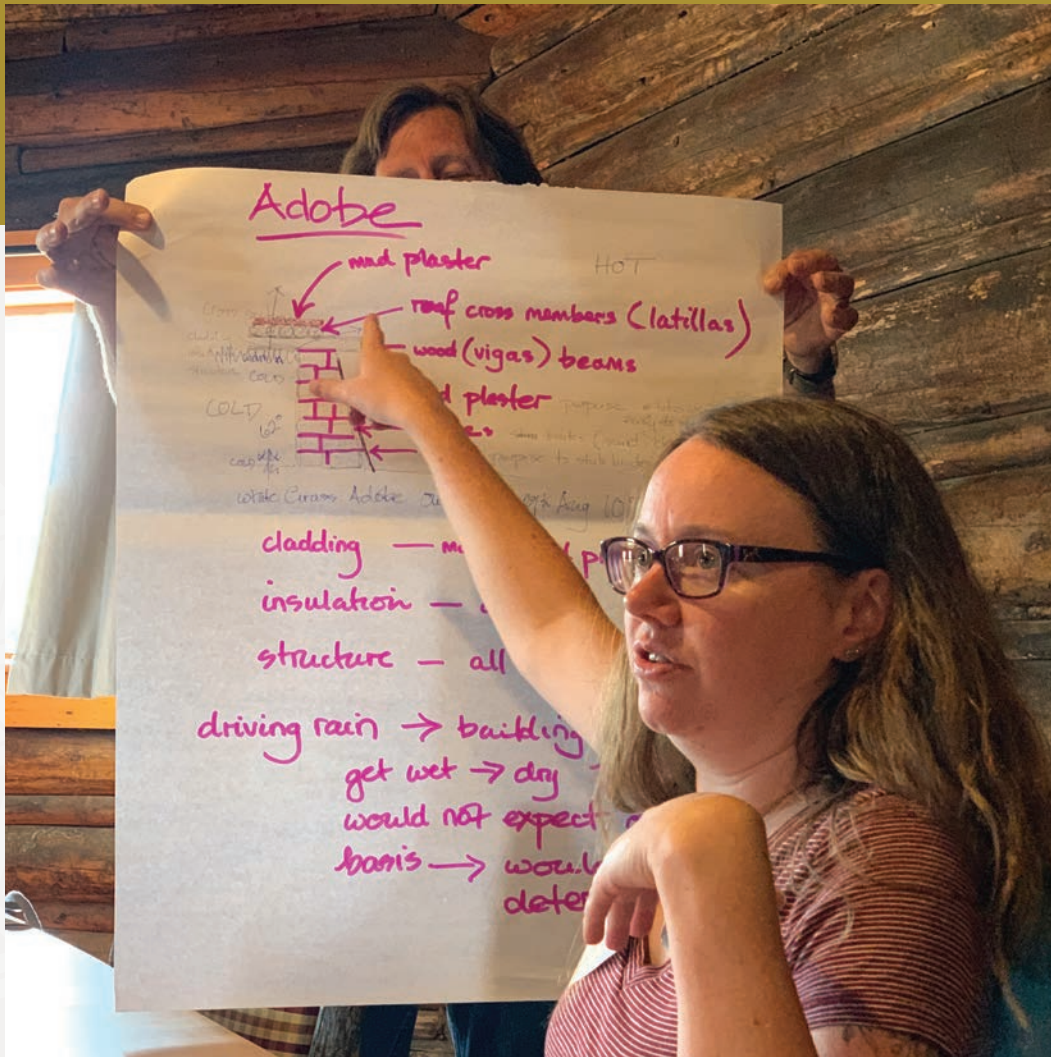
CEO  
Turner Building Science & Design LLC

Historic buildings were traditionally designed to manage the air, moisture, and energy moving through their materials and structure. When these systems are altered through a change in use, materials, or design, it can disrupt the relationship between these elements, causing unintended damage to historic fabric. While this damage is usually in the form of moisture problems, it cannot be addressed without first understanding air and energy as well. Thinking Through Water, Air, and Energy Issues in Historic Structures teaches students the mechanics and associated concepts of moisture, air, and energy dynamics as a starting point before examining how to effectively manage these in historic structures. Trainees will learn how to identify the cause of deterioration as a function of air, water, and energy movement, mitigate issues that have arisen as a result of poor interventions, and evaluate treatment strategies, both historic and modern, through the lens of building and occupant health and the Secretary of the Interior's Standards for the Treatment of Historic Properties.

Participants are encouraged to bring air, water, and energy issues from their home regions for discussion and group problem solving.

## Tuition

\$250	General participant
\$50	Student (at least half time in an accredited institution)
\$25	Grand Teton National Park employees







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